

# Soil Investigation at a Glance



## Protocols

Measurements taken once at two or more Soil Characterization Sample Sites

- top and bottom depths for each horizon in the soil profile
- structure, color, consistence, texture
- bulk density, particle size distribution, pH, and fertility (N, P, K) of samples taken from each horizon
- soil infiltration
- surface slope (in degrees)

Measurements taken at the Soil Moisture Study Site:

- soil moisture, 12 times per year
- soil temperature, weekly
- diurnal variation of soil temperature, seasonally
- soil infiltration, seasonally

## Suggested Sequence of Activities

Read *Welcome to the Soil Investigation*.

Copy and distribute to your students the scientists' letters and interviews.

Read the *Protocols* to learn precisely what is to be measured and how.

Read *The Learning Activities at a Glance* at the beginning of the *Learning Activities* section.

Do the first four activities before beginning the protocols.

Make copies of the data sheets in the *Appendix*.

Perform the *Soil Characterization Protocols*.

Perform the *Soil Moisture Protocol*.

Visit the GLOBE World Wide Web site with your students and review the data submission pages for Soils.

Submit your data to the GLOBE Student Data Server.

Do the remaining learning activities.



## Special Notes

You may require help to dig your soil pit, if you choose to dig one.